Title (en)

RADIO DIRECTION-FINDING USING TIME OF ARRIVAL MEASUREMENTS

Publication

EP 0249292 A3 19891115 (EN)

Application

EP 87201081 A 19870605

Priority

- GB 8614107 A 19860610
- GB 8614108 A 19860610

Abstract (en)

[origin: EP0249292A2] A method and a system for radio direction-finding by measuring the Time of Arrival (ToA) of the leading edge of signals from a distant source at two relatively closely spaced receiving elements. In order to give a good degree of immunity to multipath, the times at which the instantaneous detected amplitudes of the received signals first exceed a minimal threshold value such that received signals can be satisfactorily distinguished from noise is measured in such a manner that the measured time is not affected by multipath which involves more than a few metres additional path length for the indirect, delayed signal. A suitable timing circuit is disclosed. By making ToA measurements on three coplanar, non-collinear receivers, directions of incidence in three dimensions can be determined. A method and a system using both ToA and phase-difference measurements can provide the accuracy of interferometry but be simpler and cheaper.

IPC 1-7

G01S 3/50; G04F 10/00

IPC 8 full level

G01S 3/50 (2006.01); **G04F 10/00** (2006.01)

CPC (source: EP US)

G01S 3/50 (2013.01 - EP US); **G04F 10/00** (2013.01 - EP US)

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